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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,011	10/02/2003	Takayuki Watanabe	038769.52813US	6430

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EXAMINER

BONCK, RODNEY H

ART UNIT PAPER NUMBER

3681

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/676,011	Applicant(s) WATANABE ET AL.	
	Examiner Rodney H. Bonck	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>05/19/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is a first action on the merits of application Serial No.10/676,011, filed October 2, 2003.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on October 2, 2002. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

Receipt is acknowledged of the Information Disclosure Statement filed May 19, 2004. The cited documents have been considered.

Drawings

Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (note lines 5-10 paragraph [0004] and paragraph [0012]). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each of claims 1, 5 and 9, frictionally engaging elements are defined as being provided with "small" waves. It is unclear from the claims or the disclosure what size wave is considered to be "small". Thus the metes and bounds of the claim have not been clearly defined. Claim 3 is further indefinite because it is unclear what is meant by reciting that at least one of the swell portion or recess portions and the pressing raised portions "are arranged unevenly on and along a circle." Similarly, in claim 8, recitation that "positions of said swell or recess portions are arranged unevenly on and along a circle" is not understood. In claim 4 it is not clear what is meant by reciting that two frictionally engaging elements "are arranged." Claim 9 is further indefinite because it seems to contain contradictory language. The claim first states that the waves are either registered or shifted in phase but then states that they are shifted in phase.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, and 4, insofar as definite, are rejected under 35 U.S.C. 102(a) as being anticipated by the prior art of applicant's Figs. 1 and 5. The disclosed prior art comprises a multiplate clutch provided with two types of frictionally engaging elements and a piston with plural pressing raised portions. At least one type of the frictionally engaging elements has waves having recessed portions and swell portions. The pressing raised portions of the piston are shown in phase with one of the swell portions and recessed portions of the frictionally engaging elements. If the pressing raised portions of the piston are in phase with the swell portions, they are shifted in phase relative to the recessed portions; and if the pressing raised portions of the piston are in phase with the recessed portions, they are shifted in phase relative to the swell portions. Thus, the prior art of Figs. 1 and 5 meets claim 1. The portions can be considered to be uneven and arranged, as called for in claims 3 and 4, insofar as understood.

Claims 5, 8, and 9, insofar as definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberger et al.('119). The Rosenberger et al. device discloses a multiplate clutch with two types of frictionally engaging elements 22,24, at least one

Art Unit: 3681

type 22 having waves defined by swell portions and recessed portions. Adjacent frictionally engaging elements (the central elements in Fig. 1 of Rosenberger et al.) are shifted in phase relative to each other. This meets claim 5. The waves can be considered to be uneven and shifted in phase as called for in claims 8 and 9, insofar as understood.

Claims 5, 8, and 9, insofar as definite, are further rejected under 35 U.S.C. 102(a) as being anticipated by Kremer(US 2003/0150686 A1). The Kremer device discloses a multiplate clutch with two types of frictionally engaging elements 22,30, at least one type 30 having waves defined by swell portions and recessed portions. Adjacent frictionally engaging elements (see Fig. 2) are shifted in phase relative to each other. This meets claim 5. The waves can be considered to be uneven and shifted in phase as called for in claims 8 and 9, insofar as understood.

Allowable Subject Matter

Claims 2, 6, and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

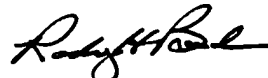
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vosler('381), Sand('673), Almen et al.('797), and Hirano(JP 4-8928 A) show other clutches with waved plates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (703)-308-2904. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703)-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck
Primary Examiner
Art Unit 3681

rhb
October 29, 2004